

Application Serial No.: 10/673,936
Amendment and Response to August 1, 2006 Non-Final Office Action

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AMENDMENTS TO THE SPECIFICATION

Please replace the paragraphs [0020] – [0022] of Published Patent Application No. 20040072658 (corresponding to page 8 of the originally filed application papers referenced I the Office Action) with the following amended paragraphs marked up to show changes made relative to the Immediate prior version:

[0020] FIG. 2 is a longitudinal section through one of the handles shown in FIG. 1, ~~showing a first embodiment of a handle.~~

[0021] FIG. 3 is a longitudinal section through ~~one of the handles shown in FIG. 1,~~ showing a second embodiment of a handle, in accordance with some embodiments herein.

[0022] FIG. 4 is a longitudinal section through ~~one of the handles shown in FIG. 1,~~ showing a third embodiment of a handle, in accordance with some embodiments herein.

Please replace the paragraphs [0029] – [0034] of Published Patent Application No. 20040072658 (corresponding to originally filed application papers) with the following amended paragraphs marked up to show changes made relative to the immediate prior version:

[0029] Reference is now made to FIG. 1, wherein a rope 1 has on each end a handle 2. Each handle consists of an elongate portion 3 which is adapted to be placed between the fingers with a transverse portion 4 then resting inside the hand of the skipper. The ends of the rope are attached to a rotatable ball 5 which is set in a cup 6 at the end of portion 3. The materials of the ball 5 and the cup 6 are chosen to enable the ball to rotate with low friction. The end of rope 1 passes through a relatively close-fitting bore in ball 5 and may be held captive in the ball by any one of a number of suitable

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means, e.g. by a knot or other enlarged end portion which is located in an enlarged counterbore (~~not shown in FIG. 2 for clarity~~) in ball 5. The dimensions of ball 5 and the cup on the end of portion 3 are such that the ball may be press-fitted into place using a force sufficient to enable that to occur, but without damage to the cup, the force to pull the rope 1 and ball 5 out of the cup being sufficiently high to ensure that the ball remains captive even at high skipping speeds. The length of portion 3 is sufficient to hold the rope sufficiently far away from the back of the user's hand to avoid risk of the rope rubbing or chafing the user's hand.

[0030] Reference is now made to FIG. 2, wherein a rope 21 has on each end a handle 22. Each handle 22 consists of an elongate portion 23 which is adapted to be placed between the fingers with a transverse portion 24 then resting inside the hand of the skipper. Note that transverse portion 24 has sub-portions 24A and 24B, said sub-portions 24A and 24B being sized i.e. by dimensioning a sub-portion of the transverse portion such that, when the handle is held such that the elongate portion passes between the first and second fingers, said sub-portion of the transverse portion is long enough to be in contact not only with the first (a.k.a. index) finger and second (a.k.a. middle) finger, but with the index finger and the middle, third (a.k.a. ring), and the fourth (a.k.a. little) fingers. Similarly, when the handle is held such that the elongate portion passes between the little finger and the ring finger, said sub-portion is long enough to be in contact not only with little finger and the ring finger, but with little finger and the ring, middle, and index fingers. The ends of the rope are attached to a rotatable ball 25 which is set in a cup 27 at the end of portion 23. The materials of the ball 25 and the cup are chosen to enable the ball to rotate with low friction. The end of rope 21 passes through a relatively close-fitting bore in ball 25 and is held captive in the ball by a knot or other enlarged end portion which is located in an enlarged counterbore 26 in ball 25. The dimensions of ball 25 and the cup 27 on the end of portion 23 are such that the ball may be press-fitted into place using a force sufficient to enable that to occur, but without damage to the cup, the force to pull the rope 21 and ball 25 out of the cup being sufficiently high to ensure that the ball remains captive even at high skipping speeds. The length of portion 23 is sufficient to hold the rope sufficiently far away from the back

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of the user's hand to avoid risk of the rope rubbing or chafing the user's hand.

[0031] Reference is now made to FIG. 3, wherein a rope 31 has on each end a handle 32. Each handle consists of an elongate portion 33 which is adapted to be placed between the fingers with a transverse portion 34 then resting inside the hand of the skipper. Note that transverse portion 34 is of a teardrop shape, and, similar to the handle shown in connection with, e.g. FIG. 2, has portions 34A and 34B, said portions 34A and 34B being sized to enable grasping of the handle with portion 33 being disposed between two fingers other than the middle and ring fingers and with the teardrop shape of transverse portion 34 conforming comfortably to the palm, and in particular having surface 37 which is especially adapted to fit the palm. The ends of the rope are attached to a rotatable ball 35 which is set in a cup 38 at the end of portion 33. The materials of the ball and the cup 38 are chosen to enable the ball to rotate with low friction. The end of rope 31 passes through a relatively close-fitting bore in ball 35 and is held captive in the ball by a knot or other enlarged end portion which is located in an enlarged counterbore 36 in ball 35. The dimensions of ball 35 and the cup on the end of portion 33 are such that the ball may be press-fitted into place using a force sufficient to enable that to occur, but without damage to the cup, the force to pull the rope 31 and ball 35 out of the cup 38 being sufficiently high to ensure that the ball remains captive even at high skipping speeds. The length of portion 33 is sufficient to hold the rope sufficiently far away from the back of the user's hand to avoid risk of the rope rubbing or chafing the user's hand.

[0032] Reference is now made to FIG. 4, wherein a rope 41 has on each end a handle 42. Each handle 42 consists of an elongate portion 43 which is adapted to be placed between the fingers with a transverse portion 44 then resting inside the hand of the skipper. Note that transverse portion 44 has a side which has arcuate depressions 46 in a pattern resembling waves, and, similar to the handle shown in connection with, e.g. FIG. 2, also has portions 44A and 44B, said portions 44A and 44B being sized to enable grasping of the handle with portion 43 being disposed between two fingers other than the middle two fingers and with the wave-shaped surface 46 of transverse portion

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~~44 accommodating~~accommodating the fingers of the user and with the other side of transverse portion ~~34-44~~ conforming comfortably to the palm, and in particular having surface 47 which is especially adapted to fit the palm. The ends of the rope are attached to a rotatable ball 45 which is set in a cup 48 at the end of portion 43. The materials of the ball 45 and the cup 48 are chosen to enable the ball to rotate with low friction. The end of rope 41 passes through a relatively close-fitting bore in ball 45 and is held captive in the ball by a knot or other enlarged end portion which is located in an enlarged counterbore 49 in ball 45. The dimensions of ball 45 and the cup 48 on the end of portion 43 are such that the ball may be press-fitted into place using a force sufficient to enable that to occur, but without damage to the cup 48, the force to pull the rope 41 and ball 45 out of the cup 48 being sufficiently high to ensure that the ball remains captive even at high skipping speeds. The length of portion 43 is sufficient to hold the rope sufficiently far away from the back of the user's hand to avoid risk of the rope rubbing or chafing the user's hand.

[0033] Reference is now made to FIG. 5A, which depicts the palm (ventral) side of a hand, shown with the ring finger and little finger moved apart from one another so as to accommodate said elongate member therebetween. Reference is now made to FIG. 5B, which is a view showing the view showing a handle of a rope according to the present invention laid in the open palm ~~depict~~depicted in FIG. 5A ~~which depicts rope 51~~ having on its end a handle 52. Each handle 52 consists of an elongate portion 53 which is adapted to be placed between the fingers with a transverse portion 54 then resting inside the hand of the skipper. Reference is now made to FIG. 5C; note that transverse portion 54 has sub-portions 54A and 54B, said sub-portions 54A and 54B being sized asymmetrically such that, when the handle is held such that the elongate portion passes between the little finger and the ring finger, said transverse portion is sized so that one sub-portion is sized to be in contact with the little finger and the ring finger, and the other sub-portion is sized so as to be in contact with the ring, middle, and index fingers. To demonstrate an alternative embodiment, the ends of the rope 51~~here~~ are not shown attached to a rotatable ball 55 which is set in a cup at the end of portion 53; in such a case, the materials of the ball and the cup would be chosen to

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enable the ball to rotate with low friction. Instead the end of rope 51 here is shown simply connected to the elongate portion 53. The length of elongate portion 53 is sufficient to hold the rope 51 sufficiently far away from the back of the user's hand to avoid risk of the rope rubbing or chafing the user's hand.

[0034] Reference is now made to FIG. 6A, which is a plan view of the palm (ventral) side of a hand, shown with the index finger and middle finger moved apart from one another so as to accommodate said elongate member therebetween. Reference is now made to FIG. 6B, which is a view showing the handle of a rope 61 according to the present invention laid in the open palm depicted in FIG. 6A which depicts rope 61 having on its end a handle 62. Each handle consists of an elongate portion 63 which is adapted to be placed between the fingers with a transverse portion 64 then resting inside the hand of the skipper. Reference is now made to FIG. 6C; note that transverse portion 64 has sub-portions 64A and 64B, said sub-portions 64A and 64B being sized asymmetrically such that, when the handle is held such that the elongate portion 63 passes between the little finger and the ring finger, said transverse portion is sized so that one sub-portion 64A is sized to be in contact with the little finger and the ring finger, and the other sub-portion 64B is sized so as to be in contact with the ring, middle, and index fingers. To demonstrate an alternative embodiment, the ends of the rope here are not shown attached to a rotatable ball 65 which is set in a cup at the end of portion 63; in such a case, the materials of the ball and the cup would be chosen to enable the ball to rotate with low friction. Instead, the end of rope 61 here is shown simply connected to the elongate portion 63. The length of elongate portion 63 is sufficient to hold the rope sufficiently far away from the back of the user's hand to avoid risk of the rope rubbing or chafing the user's hand.